

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2011-02-25  
**Date of Last Change to Activities:** 2012-07-25  
**Investment Auto Submission Date:** 2012-02-27  
**Date of Last Investment Detail Update:** 2012-02-27  
**Date of Last Exhibit 300A Update:** 2012-08-23  
**Date of Last Revision:** 2012-08-23

**Agency:** 021 - Department of Transportation      **Bureau:** 12 - Federal Aviation Administration

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** FAAXX505: En Route Automation Modernization D Position Upgrade and System Enhancements

**2. Unique Investment Identifier (Ull):** 021-435692236

#### Section B: Investment Detail

- 1. Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

En Route Automation Modernization D-Position and System Enhancements is currently in the planning phase with a final investment decision (which will baseline the program) planned for March 2013. This investment will provide software and infrastructure enhancements to the current ERAM system and is key to the FAA's ability to implement new services, concepts, and traffic flows to users. These new capabilities and enhancements will accommodate interfaces and integration of systems to fill some operational deficiencies that must be addressed. These deficiencies include: automation deficiencies in separation services; not taking full advantage of performance-based navigation; insufficient coordination of information between controllers; and increased information requirements for controllers. Additionally, hardware replacement and software enhancements will support increased performance and capacity requirements of the En Route Automation System and support the additional requirements from ERAM D-Position and System Enhancements, ADS-B, and DataComm. This investment will provide the needed infrastructure for the Data-Position Upgrade that will enable DataComm capabilities which in turn provide improved position accuracy for flight operations. The ERAM D-Position and System Enhancements interface to ADS-B will allow a reduction in the conflict probe buffer because of the availability of more accurate position and velocity information. The primary beneficiaries are the FAA, flying public, airline industry,

Department of Defense, Department of Homeland Security and the U.S. Customs and Border Protection. This program has dependencies with SWIM, ADS B, DATACOMM, and ERAM.

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

The ERAM D-Position Upgrade and System Enhancements effort will increase efficiency and add capacity benefits over those established by the baseline ERAM program. It will also build the foundation for incorporating NextGen technologies that mature during the ERAM D-Position Upgrade and System Enhancements time frame. This performance enhancement is necessary because the hardware will reach utilization thresholds due to the cumulative effects of adding ERAM System Enhancements, DataComm, ADS-B requirements as well as other NextGen capabilities. Lack of full funding may result in the ERAM hardware reaching utilization thresholds before the ERAM D-Position Enhancements can be implemented.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

En Route Automation Modernization D-Position and System Enhancements is currently in the planning phase with a Final Investment Decision planned for February 2012. PY funding was not released to the program until 7/22/2011. Planning activities are preparing to commence on 9/1/2011.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

Current Year (2012) planned accomplishments include preparing for the Final Investment Decision (FID), concept validation prototyping and user demonstrations. Budget Year (2013) planned activities include initial software engineering and design as well as hardware engineering for the D-Position display and processor.

**5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2012-02-29

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$0.0	\$5.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$0.0	\$0.0	\$0.0	\$10.0
DME (Including Planning) Govt. FTEs:	\$0.0	\$0.0	\$0.0	\$0.3
Sub-Total DME (Including Govt. FTE):	0	\$5.0	0	\$10.3
O & M Costs:	\$0.0	\$0.0	\$0.0	\$0.0
O & M Govt. FTEs:	\$0.0	\$0.0	\$0.0	\$0.1
Sub-Total O & M Costs (Including Govt. FTE):	0	0	0	\$0.1
Total Cost (Including Govt. FTE):	0	\$5.0	0	\$10.4
Total Govt. FTE costs:	0	0	0	\$0.4
# of FTE rep by costs:	0	0	0	3
Total change from prior year final President's Budget (\$)		\$0.0	\$-67.9	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

**2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:**

FY12 funding was reduced to reflect passback and to remove DOT infrastructure adjustment.

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded		<a href="#">DTFAWA-03-C-00015</a>									
Awarded		DTFWA-03-C-00071									
Awarded		DTFWA-09-C-00012									

**2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:**

The FAA does not require EVM for contracts less than \$10 million or for contracts supporting O&M activities funded by Ops. TAC2 contract is less than \$10M, the SOS Contract is for O&M activities. The Prime Contract requires EVM. Contract monitoring for the prime contract is via EVM. For TAC2 the value of the work is determined each year and a task statement is used to direct contractor efforts. Support work is closely aligned with the work required of the prime contractor and is compliant with 748A, section 3.7.3, which defines the use of LOE as EV methodology. The EV for the work is spread evenly over the calendar year. The work is constantly monitored through records of documents reviewed, papers written, support provided for specific efforts, and through monthly program and cost reviews. Using this method, the program office can redirect TAC2 efforts to most efficiently support the needs of the program. Additionally, when ERAM D-Position and Enhancements is baselined at the Final Investment Decision, program level EVM will be implemented consistent with FAA AMS guidance.

## Exhibit 300B: Performance Measurement Report

### Section A: General Information

**Date of Last Change to Activities:** 2012-07-25

### Section B: Project Execution Data

**Table II.B.1 Projects**

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
A	Investment Analysis Planning	AMS Artifacts for FID and early system engineering and prototyping – (planning -not baselined activity).			
B	Unbaselined Acquisition Activities to be identified after FAA's Final Investment Decision is completed.	Unbaselined Acquisition Activities to be identified after FAA's Final Investment Decision is completed. Planned activities to include initial system engineering and software development efforts, tech refresh assessment and further risk mitigation studies.			

### Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
A	Investment Analysis Planning							
B	Unbaselined Acquisition Activities to be identified after							

Activity Summary								
Roll-up of Information Provided in Lowest Level Child Activities								
Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
	FAA's Final Investment Decision is completed.							

Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
NONE								

Section C: Operational Data

Table II.C.1 Performance Metrics								
Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency

NONE